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BUREAU OF LAND MANAGEMENT
BATTLE MOUNTAIN FIELD OFFICE



COMMITTEE FOR IDAHO'S HIGH DESERT

P.O. BOX 2863 BOISE, IDAHO 83701

208-429-1679 www.cihd.org

July 11, 2002

Battle Mountain Field Office
50 Bastian Road
Battle Mountain, NV 89820

Dear Ms. Givens,

Here are comments of Committee for Idaho's High Desert regarding the
Programmatic EA for Geothermal Leasing in the Shoshone-Eureka Planning Area.

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BLM can not base the present geothermal leasing on the ancient and out-dated Land Use plan for this area.

1

BLM must prepare an EIS to address this geothermal leasing proposal.

2

We are very concerned that BLM has not completed comprehensive Baseline inventories on important biological values of the geothermal springs and seeps in the project area.

3

BLM must prepare an EIS to insure that mineral exploration, development and extraction is carried out so as to minimize environmental and resource damage and to provide for rehabilitation of lands. (Old RMP Objective 2), and so that BLM can develop detailed mineral resource data in areas where different resources conflict so that informed decisions can be made. (Old RMP Objective 3).

4

BLM must prepare an EIS that requires subsequent NEPA analysis at the EA or EIS level for all "proposed surface-disturbing activities in the planning area, and all ground disturbing or otherwise intrusive exploration activities, and for lease applications, exploration permits, development, and production.

5

Alternative 3 does not violate the National Energy Policy. The National Energy Policy does not say that every resource area in the BLM must produce geothermal energy.

6

BLM has not analyzed a full range of alternatives. We recommend that BLM analyze alternatives that would require an EIS for all steps in all geothermal development proposals affecting greater than 1 section of land, proposals that would affect any rare species habitats, proposals that had the potential to affect

7

the geothermal aquifer, etc. There are a large number of alternative courses of action that BLM could consider, but did not.

BLM has failed to consider all direct, indirect and cumulative impacts of many other mining and other activities on the lands and waters of the project area.

8

EA page 7 states: "Surface disturbance could occur in all or parts of the Shoshone-Eureka Planning Area ... however, reservoirs lacking surface expression may exist throughout the planing area". This statement alone points out the need for BLM to consider analysis of the proposed action at the level of an EIS, and develop alternatives that require separate EISs or EAs for all steps of the geothermal exploration and leasing program, as the entire planning area could be torn up by exploration and development activities.

9

EA page 7 sounds like a done deal has already been cut between BLM and private interests in development of a dehydration facility, right-of-way, etc. Will the dehydration facility be located on public lands? Who is the entity involved? Is there a land trade involved?

10

Is EA at 7 referring to concessionaire-type development of hot springs for recreational purposes on public lands? Please clarify.

11

What are the potential recreational values of these lands?

12

What are the powerline projects that are expected?

13

What is the relation of the Falcon-Gonder 345kV Transmission Project to any possible geothermal development?

14

We believe BLM may have greatly underestimated the "reasonably foreseeable development scenario" in its discussion of the affected environment.

15

We ask that BLM review its section 106 of the NHPA exemption for issuing leases. This can, and should, be changed.

16

Before BLM can make any decisions of any kind here, it needs to do a comprehensive inventory of biological values that may be present in association with geothermal sites. It must also collect much more comprehensive data on the geothermal aquifer (s) in the region, estimate their volume, estimate other sources of aquifer drawdown (irrigation wells) and take other measures to better understand the complex geological setting in which this action would occur.

17

Please keep us fully informed of all steps in this process and provide us with any future documents that stem from, or are tied to, any decision here.

18

Sincerely,

Katie Fite
Committee for Idaho's High Desert
PO Box 2863
Boise, ID 83701
[REDACTED]

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BUREAU OF
BATTLE MOUNTAIN

United States Department of the Interior
NEVADA FISH AND WILDLIFE OFFICE
1340 FINANCIAL BOULEVARD, SUITE 234
RENO, NEVADA 89502-7147

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August 14, 2002
File No. BLM 4-2

Memorandum

To: Assistant Field Manager, Nonrenewable Resources, Bureau of Land Management, Battle Mountain, Nevada (Attn: Mary Craggett)

From: Field Supervisor, Nevada Fish and Wildlife Office, Reno, Nevada

Subject: Programmatic Environmental Assessment, Geothermal Leasing in the Shoshone Eureka Planning Area

We have reviewed the Programmatic Environmental Assessment (EA) on Geothermal Leasing in the Shoshone-Eureka Planning Area (N063-EA02-16) dated July 2002. The EA is to be used as the primary environmental document for the leasing of geothermal resources and the subsequent exploration in the Shoshone-Eureka Planning Area. It also is needed to meet the National Environmental Policy Act (NEPA) requirements related to the Bureau of Land Management's (BLM) June 2001 National Energy Policy Implementation Plan, issued in response to the Bush Administration's National Energy-Policy and the President's Executive Order (EO) 13212, Actions to Expedite Energy-related Projects.

The Shoshone-Eureka Planning Area covers 4.3 to 4.4 million acres in Lander, Eureka, and northern Nye counties. The EA states that the proposed action is subject to site-specific analysis and does not include development of geothermal resources. Any proposed surface disturbing activity must undergo a site-specific NEPA analysis before authorization can be granted. Our comments and recommendations on the programmatic EA are provided below.

GENERAL COMMENTS

The scope of the EA is not adequate to fulfill the requirements of the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (Regulations). CEQ Regulations state that, to determine the scope of environmental impact statements, agencies shall consider actions which may be

- (1) Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they:
- (i) Automatically trigger other actions which may require environmental impact statements.
 - (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously.
 - (iii) Are interdependent parts of a larger action and depend on the larger actions for their justification.

We believe geothermal leasing, exploration, and development are interdependent parts of a larger action. Furthermore, geothermal development cannot proceed without leasing and exploration taking place. Therefore, geothermal development should be analyzed as part of the proposed action, not as a cumulative effect. The EA presents a reasonable development scenario as a cumulative effect and provides a very superficial analysis of impacts.

20

The EA states in the Purpose of and Need for Action section that existing EAs do not contain analysis of cumulative impacts, and that the programmatic EA will focus strongly on cumulative impact analysis. However, we believe the cumulative impact analysis in the programmatic EA does not meet the requirements of NEPA or the Council on Environmental Quality's (CEQ) guidelines for such analysis. The CEQ's January 1997 publication, "Considering Cumulative Effects Under the National Environmental Policy Act," specifies the following:

The range of actions that must be considered includes not only the project proposal but all connected and similar actions that could contribute to cumulative effects.

CEQ's guidance document provides in tabular form examples of cumulative effects situations faced by Federal agencies, including both multiple agency actions and other actions affecting the same resource. For example, if a land management agency were to evaluate the degradation of rangeland from multiple grazing allotments in an EA, they would have to evaluate the cumulative effects on the rangeland from invasion of exotic weeds because both degrade rangeland. In regards to geothermal leases, if exploratory drilling may adversely affect the temperature and discharge of a spring, the cumulative effects analysis would need to evaluate other past, present, and reasonably foreseeable future actions that have or are likely to affect the temperature and discharge of the spring. This would include other wells, geothermal exploration on nearby private lands, or other actions that may affect the same aquifer. Regarding surface disturbance associated with geothermal exploration, the cumulative effects analysis should examine other surface disturbing activities such as livestock grazing and recreation affecting the same areas. For some resources, a landscape level analysis may be appropriate. However, the programmatic EA does not examine such cumulative effects, but limits the analysis to geothermal leasing and development, and then only for land surface disturbance. No indirect effects are evaluated. We recommend this major deficiency be rectified.

21

Chapter 1.0 - Introduction/Purpose of and Need for Action

Purpose of and Need for Action Page 2-paragraph 1 It would be helpful to include the text of the President's EO in the Appendix and reference it here.

22

Chapter 2.0 - Proposed Action and Alternatives

Proposed Action. Page 4. The first sentence of paragraph 1 states that the Proposed Action is the leasing and subsequent exploration of BLM-administered geothermal resources in the Shoshone-Eureka Planning Area. However, it is not clear whether leases and exploration are for the entire planning area, or for just specific portions of it as is being evaluated by the BLM's Carson City Field Office for their planning area. The document should explain if leases and exploration would be limited to areas surrounding geothermal sites shown on Map 2, Geothermal Resources, in Appendix A.

23

No information is provided in this section on the number of leases anticipated to be issued under this programmatic EA or whether the number would be unlimited.

24

It would be helpful if the last paragraph on page 4, which provides a brief list of what geothermal exploration operations include, referred the reader to Appendix B of the document. Appendix B provides a more detailed discussion of this topic.

25

Alternatives, page 5. Another reasonable alternative that should be considered in the EA is to limit leasing, exploration, and development to specific areas, including those without sensitive resources such as threatened or endangered species or species of concern. We recommend this alternative be evaluated.

26

Chapter 3.0 - Affected Environment and Environmental Consequences

Proposed Action Reasonably Foreseeable Development Scenario for Geothermal Resources. Page 7, paragraph 1. This paragraph states that geothermal plants are generally compact and do not have a large impact on the environment. Although we agree that surface disturbance often covers not more than 150 acres, other impacts can be significant. These relate to: 1) direct and indirect impacts to springs and their associated biota through groundwater drawdown, and 2) the release of geothermal fluids, which may be toxic to some organisms, to the surface if reinjection is not feasible. We recommend this issue be addressed in the final EA.

27

Again, we reiterate that the cumulative effects sections of this document need to examine other reasonably foreseeable future actions that may similarly affect the same resources that

28

Assistant Field Manager
geothermal exploration and development would affect.

File No. BLM 4-2

Table: Critical Elements and Other Resources Checklist Page 9 Missing from this table is Water Quantity as a critical element. Actions taken during geothermal exploration or development could affect the output of springs, springbrooks, and seeps and may adversely affect their associated resources as well. We recommend this element be added to the table. We assume that biotic components of seeps, springs, and springbrooks would be addressed under Wetlands/Riparian and Wildlife.

29

Resources Present and Brought Forward for Analysis: Air Quality d. Fumes and Noxious Gases. Page 10. This section discusses fumes and gases dispelled by vehicles traveling roads and farm machinery that traverse or are used in the planning area. This is a cumulative effect and would seem to be better addressed in the cumulative impacts section on the following page.

30

Resources Present and Brought Forward for Analysis: Air Quality. Mitigation Measures Items 1 and 3. Page 11. The EA should describe where the water for dust suppression will be obtained and evaluate the effects of obtaining this water. Disturbed areas should be revegetated with native plant species.

31

Special Status Species: List of Species. Pages 15 and 16. We recommend a thorough review of the list of scientific names for species on these pages. Several have typographic errors or are mis-spelled. To the best of our knowledge, the following plant species on the list do not occur in the project area: *Astragalus oophorus* var. *lonchocalyx*, *Astragalus remotus*, *Camissonia megalantha*, *Eriogonum tiehmii*, and *Polycatenium williamsiae*.

32

Special Status Species: Mitigation Measures. Page 17. The EA lists 32 animal and 22 plant species that may be affected by the proposed project, yet mitigation measures are discussed for only two animal species. We recommend you provide mitigation measures for all sensitive species or explain why mitigation measures for the remaining species will be developed only on an individual project basis and not at the programmatic level as well. Examples of other mitigation measures that should be considered are:

33

- o Exploration methods that require the use of explosive charges placed below ground level would not be permitted within $\frac{1}{2}$ mile (or possibly more, depending on the geology of the area and size of the explosive charge) of an active Burrowing Owl burrow.
- o Exploration methods that could adversely impact aquatic resources harboring sensitive fish species or spotted frogs would not be allowed.

There is increasing concern regarding the status of Sage Grouse in Nevada. Discussions regarding the various conservation efforts taking place throughout the State may be pertinent,

including the Governor's State-wide Conservation Strategy. Additional measures may be required for protecting this species beyond what is included on page 17. We recommend you address this issue in the final EA.

34

Hydrology and Water Quality. Environmental Consequences Proposed Action Page 18. This section states that impacts to surface and ground waters resulting from geothermal exploration activities in the Planning Area are unknown. However, the Technical Report in Appendix B explains some of the adverse effects on surface and ground waters that may occur with geothermal exploration. The potential effects should be noted and mitigation measures proposed to offset these impacts.

35

The last paragraph in this section lists unacceptable surface or subsurface impacts that may occur. The EA should quantify levels that are unacceptable and explain how they were determined.

36

Wetlands/Riparian Zones. Environmental Consequences: Proposed Action. Page 19. This section states that geothermal resources often have surface expression in the form of springs. The EA discusses impacts to riparian areas associated with these springs. However, it does not address potential impacts to the springs, springbrooks, and associated aquatic species. The EA should address these potential impacts of both surface disturbance and groundwater pumping on these resources as well as identify appropriate mitigation measures. Many Nevada springs have not been surveyed, but it is known that Great Basin springs support a high number of endemic species. Project-specific surveys should be completed to determine what species are present so the potential impacts to these organisms can be addressed. We recommend you adopt the guidelines outlined in the BLM's Technical Reference 1737-17: A Guide to Managing, Restoring, and Conserving Springs in the Western United States.

37

Wetlands/Riparian Zones. Cumulative Impacts. Page 20. There is not enough information to determine if this section addresses all the potential adverse cumulative impacts that have occurred in the past or may occur in the future. The document should explain whether other disturbance occurred in the past, or will occur in the future, in the area of geothermal springs in the planning area. Such disturbance could include, but not be limited to, past, present, and future livestock and wild horse use, recreation, spring development projects, and groundwater drawdown associated with water diversions for agriculture. The final EA should include a cumulative effects analysis of these factors.

38

Wetlands/Riparian Zones Mitigation Measures. Page 20. This section states that no exploration activities should occur within 100 feet of riparian areas. A similar EA produced by the Carson City Field Office stipulates that "any open body of water, such as a canal, ditch, slough, pond, creek, or stream, and riparian areas will be avoided by one mile to minimize impacts to riparian habitats and wildlife that depend on them. We prefer this stipulation because it is more protective of fish and wildlife resources. If you are unable to adopt this

39

measure, the EA should explain why.

We are concerned there may be a potential lag in time between when exploration or development activities would occur and when possible adverse affects to spring discharge would become apparent. We recommend that the potential for this to occur be discussed in the EA and measures to monitor and mitigate for such effects presented.

40

Invasive Nonnative Species. Mitigation Measures. Page 21. Additional mitigation measures to reduce the potential for spread of invasive weeds that we recommend be considered are: 1) cleaning the exterior of vehicles and heavy equipment in addition to the underside, and 2) cleaning the boots of operators and other persons working in the area before they come onto BLM lands.

41

Soils. Environmental Consequences: Proposed Action. Page 24. Other sections of the document indicate that exploratory operations may occur on or in the immediate vicinity of playas. We recommend discussion be added to the EA of the potential effects of exploratory drilling on playa soils, particularly water-confining soil layers, and how drilling may affect hydrology of the playa if water-confining soil layers are compromised. Because of the importance of playas to migratory waterbirds and shorebirds, mitigation measures should be developed to ensure playa hydrology is not adversely affected by exploration activities or geothermal development.

42

Vegetation. Mitigation Measures. Pages 27 to 30. This section states that areas disturbed in exploration would be reseeded with native or introduced plant species, depending on site conditions. Lists of species of shrubs and forbs are presented for revegetation of different plant communities. We recommend non-native species, as well as native species not indigenous to the areas to be revegetated, not be used in habitat restoration. Forage kochia (*Kochia prostrata*), small burnet (*Sanguisorba minor*), and Russian wildrye (*Elymus junceus*) are not native to Nevada. The scientific name of common sainfoin (page 29) is not provided, and we are unable to comment on this plant. The species of currant (*Ribes* sp.), yarrow (*Achillea* sp.), cinquefoil (*Potentilla* sp.), snowberry (*Symphoricarpos* sp.), and serviceberry (*Amelanchier* sp.) should be specified to avoid introduction of plants not indigenous to the area.

43

Migratory Birds. Mitigation Measures. Page 32. Although this paragraph states that areas to be disturbed during the migratory bird nesting season would be walked ahead of time to determine the existence and location of any nests, no information is provided on what measures would be implemented if nests are found. Such measures are needed to ensure conformance with the provisions of the Federal Migratory Bird Treaty Act. The ideal approach would be to not conduct exploration activities during the avian breeding season. If this is not feasible, and nests are found, we recommend a buffer area be established around each nest, the width depending on the needs of the species, and the area avoided until the young have fledged and are able to fly fairly well (about 2 weeks after fledging for most songbirds).

44

Appendix A. Figure 1. Page IV. The map on this page is difficult to read, and it is not clear why it is presented or what information relative to the geothermal leasing proposal it is supposed to convey.

45

Appendix B. Seismic Survey. Page 5 briefly describes an explosive method for seismic exploration. The document should explain what effects this method would have on wildlife or discharge of water from springs if it is used in the planning area.

46

Appendix B. Temperature Gradient Wells. Page VIII. The document should explain what effect this exploration method could have on groundwater and springs if used in the planning area.

47

Appendix B. Exploration Wells. Page IX, paragraph 3. This section should explain what the waste fluids and drill cuttings consist of and what happens to waste fluids and drill cuttings after they are put into the reserve pit. This information would be important to understanding the potential effects on fish and wildlife resources.

48

Appendix B. Drilling Terms, Methods, and Procedures. Pages IX and X. Temperature gradient holes, geologic information holes, and exploration wells all could impact ground and surface water, depending on their location. Drilling and blowouts also could affect these resources. The reader is referred to Appendix C for additional information on impacts to water. However, Appendix C provides a very superficial discussion on this subject and does not extend the discussion to the concomitant effects on aquatic biota. We recommend the section be expanded and this information provided. It may be helpful to list specific areas with sensitive resources where certain exploratory methods would not be permitted.

49

The first paragraph on page X discusses mud pits, but the information is very general. We recommend discussion be provided on whether the plastic or bentonite layer would stay in the soil after the mud pit is no longer in use. Discussion should also be provided on what type of contaminants, if any, may contaminate surface or ground water resources.

50

Appendix B. Close-out. Page XVI. We recommend that solid waste be discarded at an established dump to avoid developing a new facility.

51

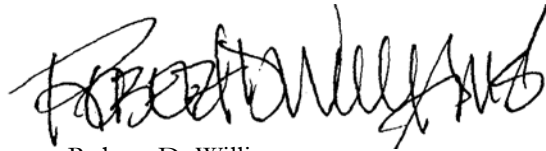
Appendix C. Impact of Geothermal Development on Water Resources. Page XVIII. This section discusses the water demand for geothermal operations. We recommend you contact the State Water Engineer and discuss the feasibility of areas to be leased to support such a large amount of water extraction. The information provided by the State Water Engineer's office should be provided in this and future environmental documents.

52

Assistant Field Manager

File No. BLM 4-2

We appreciate the opportunity to provide comments on the proposed geothermal leasing and future activities. If you have any questions or require additional information, please contact me or Chad Mellison at [REDACTED].

A handwritten signature in black ink, appearing to read "Robert Williams", with a stylized flourish at the end.

Robert D. Williams

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2002 AUG 19 PM 3:20

DEPARTMENT OF ADMINISTRATION

209 E. Musser Street, Room 200
 Carson City, Nevada 89701-4298
 Fax (775) 684-0260
 (775) 684-0209

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August 14, 2002

Ms. Mary Craggett
 Planning and Environmental Coordinator
 Bureau of Land Management
 Battle Mountain Field Office
 50 Bastian Road
 Battle Mountain, NV 89820
 Re: SAI NV # E2003-005

Project: PEA, Geothermal Leasing in the Shoshone Eureka Planning Area

Dear Ms. Craggett:

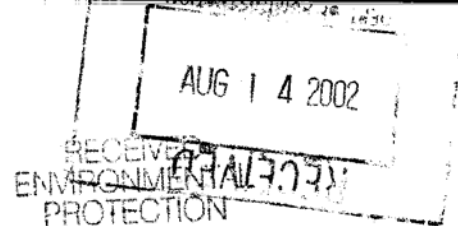
Enclosed are the comments from the Nevada Divisions of Environmental Protection, Wildlife and Agriculture, the State office of Historic Preservation and the Natural Heritage Program concerning the above referenced report. These comments constitute the State Clearinghouse review of this proposal as per Executive Order 12372. Please address these comments or concerns in your final decision. If you have questions, please contact me at [REDACTED].

Sincerely,

Heather K. Elliott
 Nevada State Clearinghouse/SPOC

NEVADA STATE CLEARINGHOUSE

Department of Administration
Budget and Planning Division
209 East Musser Street., Room 200
Carson City, Nevada 89701-4298



ENVIRONMENTAL
PROTECTION

(775) 684-0209

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DATE: July 16, 2002

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Washington Office
Nevada Assoc. of Counties
Nevada League of Cities

Conservation-Natural Resources
Director's Office
State Lands
Environmental Protection
Forestry
Wildlife
Region 1
Region 2
Region 3
Conservation Districts
State Parks
Water Resources
Natural Heritage
Wild Horse Commission

Nevada SAI #

E2003-005

Project: Geothermal Environmental Assessment and Geothermal Licensing in the Shoshone-Paiute Planning Area

1 1

CLEARINGHOUSE NOTES:

Enclosed, for your review and comment, is a copy of the above mentioned project. Please evaluate it with respect to its effect on your plans and programs; the importance of its contribution to state and/or local areawide goals and objectives; and its accord with any applicable laws, orders or regulations with which you are familiar. Please submit your comments no later than August 13, 2002 Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAI number and comment due date for our reference. Questions? Heather Elliott, [REDACTED]

THIS SECTION TO BE COMPLETED BY REVIEW AGENCY:

NO comment on this project
-Proposal supported as written
X Additional information below

Conference desired (See below)
Conditional support (See below)
Disapproval (Explain below)

AGENCY COMMENTS:

The Geothermal operators will need to permit their water discharges through the Bureau of Water Pollution Control of the Division of Environmental Protection. Each applicant will need to evaluate the impacts of the operations upon the surface and groundwaters, including such programs as the stormwater and septic programs.

53

Signature

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NDEP
Agency

8/13/02
Date



KENNY C. GUINN
Governor

BIVED
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STATE OF NEVADA

R. MICHAEL TURNIPSEED, P.E.

POW-by

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2002 AUG 10

DIVISION OF WILDLIFE
1100 Valley Road

TERRY R.
cRAWtTkHhello;

August 12, 2002

Heather Elliott
Nevada State Clearinghouse
Department of Administration
Budget and Planning Division
209 East Musser Street, Room 200
Carson City, NV 89701-4298

SAI# E2003-005, Programmatic EA., Geothermal Leasing in the Shoshone Eureka
Planning Area, BLM

Dear Ms. Elliott:

We appreciate the opportunity to provide comments on for scoping the Programmatic EA for geothermal leasing in the Shoshone Eureka planning area. On page 4, in Section 2.0 Proposed Action and Alternatives, the matrix which displays the process for the programmatic EA indicates the Exploration Permit can be issued in one month. with documentation of NEPA adequacy. Our agency is concerned with this type of rapid response. We are unsure if it will be possible to for our agency to provide an adequate analysis of the impacts from the proposed exploration project on wildlife resources in this limited amount of a time frame. We would suggest that 60-90 days would be a more reasonable time frame for this type of coordination between the Bureau of Land Management and the Division of Wildlife.

54

On page 17, the document discusses the potential mitigation measures for the purposes of this EA. The only wildlife resources provided mitigation were sage grouse, nesting birds and ferruginous hawks. There are numerous other wildlife resources that could be impacted by exploration and development of geothermal sites. Antelope, furbearers, nongame mammals and reptiles all could inhabit the sites. Mitigation for these resources should also be evaluated depending on the presence of these resources.

55

On page 32, under the heading of Migratory Birds, the Mitigation Measures indicates areas to be disturbed will be walked ahead of time to determine the existence and location of any nests. There is no indication of what will occur if nests are located. If something is to occur, it should be included in the document.

56

On page 33, under the heading of Wildlife, the Mitigation Measures indicate linear features would be minimized and the disturbances would be isolated unconnected blocks of land where possible. We do not see how these design items will mitigate the impacts of the proposed actions on wildlife.

57

Heather Elliott
August 12, 2002
Page 2

Throughout the document there was no discussion regarding the discharge of effluent from the facility. At several of the existing sites using geothermal resources for power generation and food processing, there has been permitted a surface discharge of the spent water. The quality of this water is oftentimes very poor due to high concentrations of salts and metals. The potential impacts to wildlife resources from poor quality water discharges should be an issue included in the initial examination of the impacts of the proposed project.

58

Changes in existing surface water resources as a result of exploitation of geothermal sites is also a concern to our agency. If the use of underground geothermal resources changes the surface water resources, this change could be very problematic to wildlife dependent on those surface waters.

59

If you should need any additional information or have any questions concerning this information, please feel free to call me.

Sincerely,

Rory E. Lamp
Biologist III
1375 Mountain City Highway
Elko, NV 89801
[REDACTED]

IZLLxI

c c:Habitat Bureau

Battle Mountain Field Office, NDOW

Eureka Field Office, NDOW

Fite

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BUREAU OF LAND MANAGEMENT
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Department of Administration
Budget and Planning Division
200 E. Main Street, Suite 200
Carson City, Nevada 89701-4298
(775) 684-0209
Fax (775) 684-0260

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DATE: July 16, 2002

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Region 2
Region 3
Conservation Districts
State Parks
Water Resources
Natural Heritage
Wild Horse Commission

Nevada SAI #

E2003-005

Project: **Programmatic Environmental Assessment on Geothermal Leasing in the Shoshone-Eureka Planning Area**

☒ - Yes - ☐ Send more information on this project as it becomes available.

CLEARINGHOUSE NOTES:

Enclosed, for your review and comment, is a copy of the above mentioned project. Please evaluate it with respect to its effect on your plans and programs; the importance of its contribution to state and/or local areawide goals and objectives; and its accord with any applicable laws, orders or regulations with which you are familiar.

Please submit your comments no later Than August 13 2002 Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAI number and comment due date for our reference. Questions? Heather Elliott, [REDACTED].

THIS SECTION TO BE COMPLETED BY REVIEW AGENCY:

No comment on this project
Proposal supported as written
Additional information below

Conference desired (See below)
Conditional support (See below)
Disapproval (Explain below)

AGENCY COMMENTS:

Minimal impact on grazing as stated on pg. 22

Signature

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Agency

Date

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.Department of Administration

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and Planning Division



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Fax (775) 684-0260

DATE: July 16, 2002 ..

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 Minerals UNR Bureau of Mines
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 Human Resources
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 Indian Commission
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Legislative Counsel Bureau Conservation-Natural Resources
 Information Technology Director's Office
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 Region 3
 Emergency Management Conservation Districts
 Office of the Attorney General ~ State Parks
 Washington Office Water Resources
 Nevada Assoc. of Counties Natural Heritage
 Nevada League of Cities Wild Horse Commission

Nevada SAI #

E2003-005

Project: Programmatic Environmental Assessment on Geothermal Leasing in the Shoshone-Eureka Planning Area

Yes - No Send more information on this project as it becomes available.

CLEARINGHOUSE NOTES:

Enclosed, for your review and comment, is a copy of the above mentioned project. Please evaluate it with respect to its effect on your plans and programs; the importance of its contribution to state and/or local areawide goals and objectives; and its accord with any applicable laws, orders or regulations with which you are familiar.

Please submit your comments no later than August 13, 2002. Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAI number and comment due date for our reference. Questions? Heather Elliott, [REDACTED]

THIS SECTION TO BE COMPLETED BY REVIEW AGENCY:

No comment on this project
 Proposal supported as written
 Additional information below

Conference desired (See below)
 Conditional support (See below)
 Disapproval (Explain below)

AGENCY COMMENTS:

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Signature

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Agency

Date

Heather Elliott**From:****"James D. Morefield"** <jdmore@govmail.state.nv.us>**To:****"Elliott, Heather"** <helliott@govmail.state.nv.us>**Sent:****Monday, August 12, 2002 3:14 PM****Subject:****E2003-005 Shoshone Eureka Geothermal Draft Programmatic EA**

This is the Nevada Natural Heritage Program's response to the Nevada State Clearinghouse item referenced below. Please contact us if this response is needed in hard-copy or another format. Otherwise hard-copy will be retained in our files according to our Records Retention Schedule. -----

NEVADA SAM E2003-005 PROJECT: Draft Programmatic EA on Geothermal Leasing in the Shoshone-Eureka Planning Area COMMENTS DUE: 13 August 2002 Send more information on the project as it becomes available: YES Check-offs: Conditional support, Additional information below

AGENCY COMMENTS:

We very much appreciate the inclusion of specific seed mix lists in the Vegetation section (pages 24-30) of the DPEA, including both common and scientific names. This greatly facilitates our analysis of the proposed action, and enables us to provide specific comments and recommendations in a timely manner.

There are two species included in several of the lists to which we have specific objections. Palmer penstemon (*Penstemon palmeri* var. *palmeri*) should not be planted in or near the range of the Lahontan beardtongue (*Penstemon palmeri* var. *macranthus*). Lahontan beardtongue is a State of Nevada sensitive species which likely qualifies for, and would soon be included on, the Nevada State BLM sensitive species list. It is a rare species known from Pershing, Churchill, and northern Nye counties, Nevada, and from very near and possibly within Lander County, Nevada. Palmer penstemon has the potential to hybridize with Lahontan beardtongue, thereby diluting the genetic stock of the latter and possibly rendering "pure" Lahontan beardtongue even rarer and more vulnerable to extinction. We would like to avoid any possible trend toward federal listing of Lahontan beardtongue, and one way to do this is to find acceptable substitutes for Palmer penstemon for projects in and near the range of Lahontan beardtongue. Palmer penstemon is indigenous to eastern and southern Nevada, but not to west-central Nevada where Lahontan beardtongue is indigenous.

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We are also concerned about the invasive potential of forage kochia (*Kochia prostrata*). There is some available literature indicating that forage kochia can quickly invade native vegetation under certain environmental conditions prevalent in the northern Great Basin. There is other literature disputing this potential. The Idaho State Office of BLM may soon consider adding forage kochia to its noxious weed list. Until more

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conclusive and widely accepted data are available on the invasive potential of forage kochia, we request that forage kochia not be included in seed mixes, or that it be used only in specifically analyzed cases where no other alternatives are available, and where the environmental consequences of NOT using forage kochia would be significantly worse than the potential of adding another invasive non-native species to the landscape.

Thank you for the opportunity to provide input to this project.

(signed) James D. Morefield, Biologist III/Botanist
Nevada Natural Heritage Program 12 August 2002

James D. Morefield, Ph.D., Botanist Nevada Natural
Heritage Program Department of Conservation and
Natural Resources 1550 East College Parkway, suite 145
Carson City NV 89706-7921 U.S.A.

<http://www.state.nv.us/nvnbp/> email:

jdmore@govmail.state.nv.us

tel: [REDACTED]

8/12/2002

Comment Number	Response
1	Comment Noted. The proposed action is consistent with the Shoshone-Eureka Resource Management Plan.
2	Site-specific proposals will require site-specific analyses that will determine the appropriate level of NEPA analysis
3	See 2.
4	See 2. Development and extraction are specifically excluded from the EA, page 5.
5	See 2 and 4.
6	Comment Noted. Executive Order 13212, Sec. 2., Actions to Expedite Energy-Related Projects. states, “For energy-related projects, agencies shall expedite their review of permits or take other actions as necessary to accelerate the completion of such projects, while maintaining safety, public health, and environmental protections. The agencies shall take such actions to the extent permitted by law and regulation, and where appropriate.”
7	Additional alternative were considered but not included in the EA due to lack of information. Some of these alternatives are listed in the Alternatives Considered But Eliminated from Detailed Analysis section of the revised EA. See 2.
8	Comment noted. The Cumulative Impacts analysis in this EA has been strengthened to include impacts from additional foreseeable sources. In addition, Mitigation, Residual Impacts, and Cumulative Impacts have been moved to a separate section where the cumulative impacts are presented in tabular form.
9	See Comment 2. This EA does not preclude an EIS from being developed, if significant impacts are anticipated from future proposals. Such high levels of exploration are not anticipated in the reasonably foreseeable future. Development is beyond the scope of this EA (EA page 5).
10	This is a hypothetical example. Wording in the EA has been clarified.
11	Comment noted. If liability issues are resolved, development of “concessionaire-type” geothermal springs may possibly occur.
12	See 2.
13	This is beyond the scope of this EA. There are no specific proposals at this time.
14	None known.
15	The reasonably foreseeable development scenario is based upon the best available information. If Committee for Idaho’s High Desert has additional information, please provide this office with such information.
16	Comment noted.
17	Comment noted. See 2.
18	Comment noted.
19	This document is a programmatic Environmental Assessment, not an Environmental Impact Statement. Geothermal leasing and exploration, but not development, are considered in this EA. Geothermal leasing and exploration may lead to development of a geothermal resource, but such development is not automatically triggered by issuance of a lease or an exploration permit. While development of a geothermal resource does require prior exploration, the reverse is not true; exploration does not require geothermal development.
20	See 8, 19.
21	See 8.

Comment Number	Response
22	The Executive Order has been added as an appendix.
23	The EA is written for leasing within the entire Shoshone-Eureka Planning Area. The wording has been changed to clarify this point.
24	There is no intent at this time to limit the number of leases.
25	Comment noted and change made.
26	See 7.
27	See 2.
28	See 8.
29	Critical elements are mandated therefore, water quantity was not added to the Critical Elements. However, water quantity will be added to Other Resources for the revised EA.
30	Comment noted and change made.
31	See 2. Native vegetation will be used whenever possible. However to compete with invasive nonnative species, such as cheat grass, some introduced species may need to be used.
32	Comment noted.
33	Comment noted.
34	Comment noted.
35	Comment noted.
36	Comment noted. Exact quantities will be determined on a case-by-case basis where appropriate.
37	Comment noted.
38	Comment noted. See 2 and 8.
39	Comment noted. Some changes have been made.
40	Comment noted and changes have been made.
41	Comment noted and suggested mitigation has been adopted.
42	Comment noted and changes have been made to provide for the protection of playas.
43	Comment noted. See 31.
44	Comment noted.
45	Figure 1 was to show the Battle Mountain High. The figure has been removed for the Final EA.
46	Appendix B is taken from another document and therefore should not be altered. Reference to this document has been added in the Final EA. Comments noted and will be taken into account in future documents of this type.
47	See 46.
48	See 46.
49	See 46.
50	See 46.
51	See 46.
52	Comment noted.
53	Comment noted.
54	Comment noted.
55	Comment noted and some changes have been made.
56	Comment noted and some changes have been made.
57	Comment noted. Linear features tend to inhibit movement of animals more so than

Comment Number	Response
	isolated blocks of lands.
58	See 2. Generally, spent geothermal waters are re-injected.
59	Comment noted and changes have been made.
60	Comment noted and some changes have been made. See 31.
61	Comment noted some changes have been made. See 31.